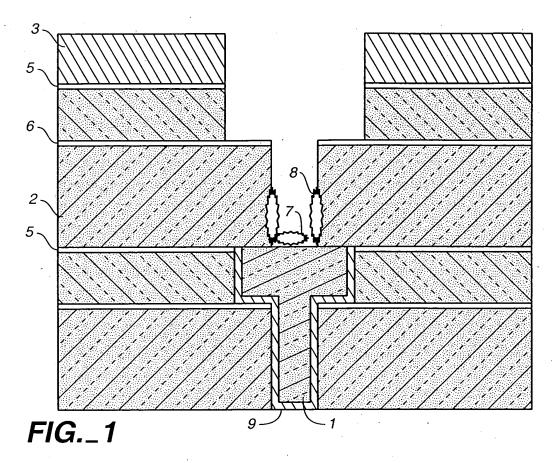
Title: Post Etch Cleaning Composition and Processor Dual Damascene System

Inventor(s): Catherine M. Payne, et al.

Atty. Docket No.: 008317-0123-999

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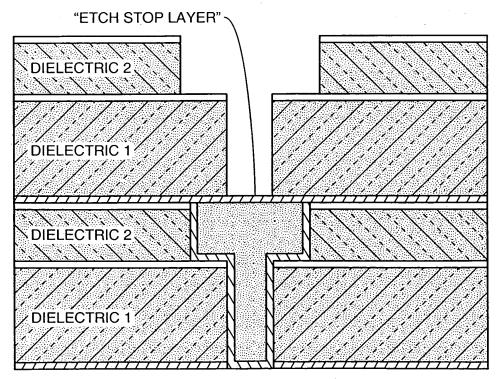
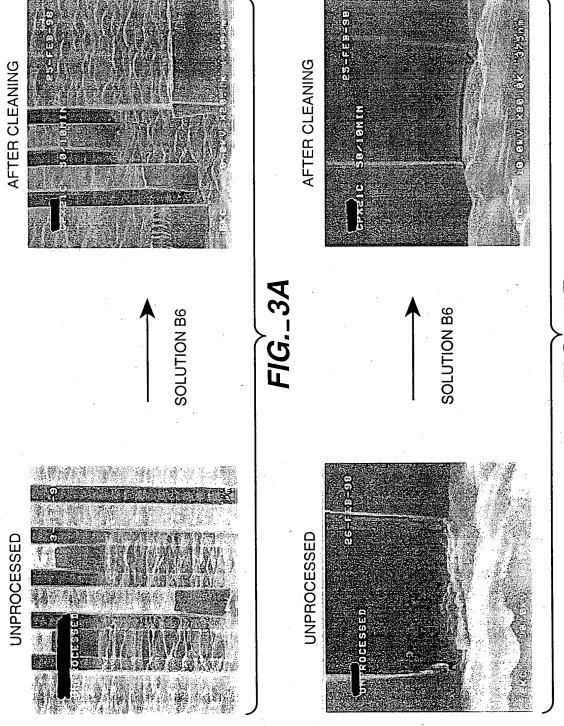


FIG._2

sala Title: Post Etch Cleaning Composition and Process for Dual Damascene System
Inventor(s): Catherine M. Payne, et al.
Atty. Docket No.: 008317-0123-999



Damascene System

Inventor(s): Catherine M. Payne, et al. Atty. Docket No.: 008317-0123-999

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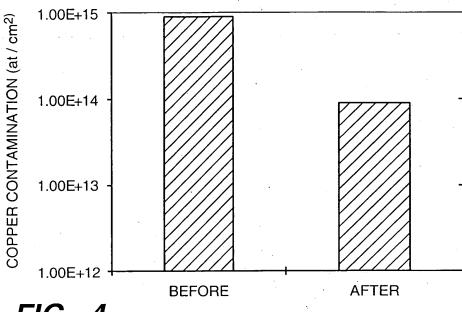


FIG._4

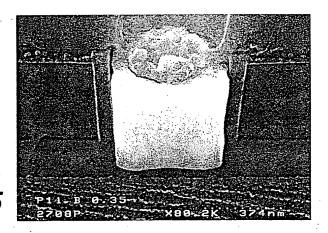


FIG._5

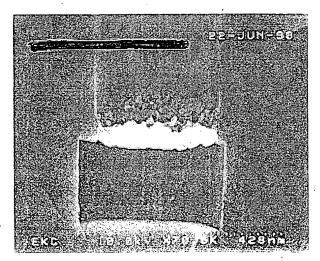


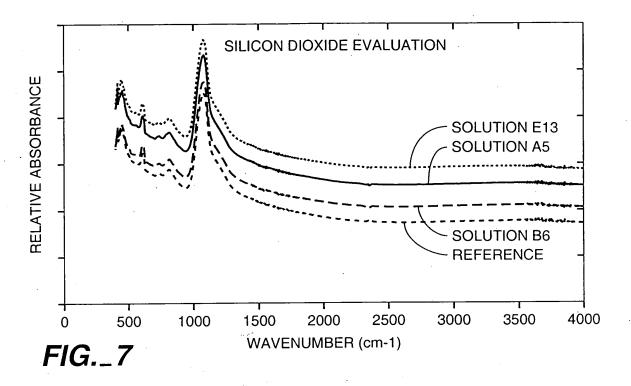
FIG._6

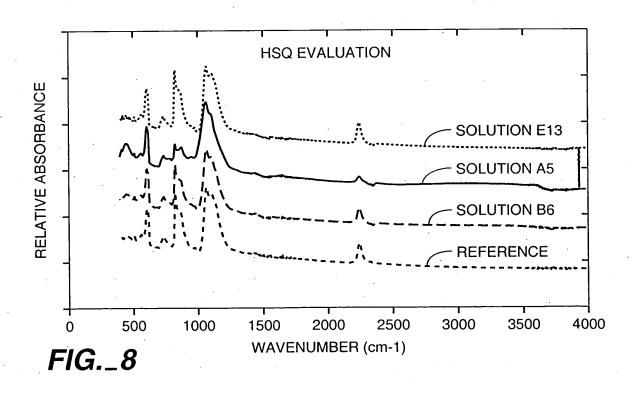
EKCT-014/01US

Title: Post Etch Cleaning Composition and Process for Dual

Damascene System
Inventor(s): Catherine M. Payne, et al.

Inventor(s): Catherine M. Payne, et al Atty. Docket No.: 008317-0123-999

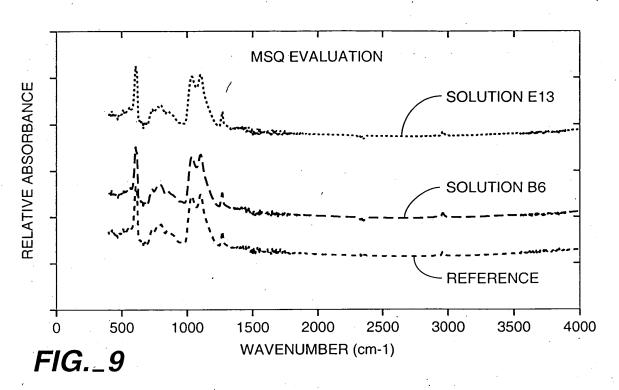


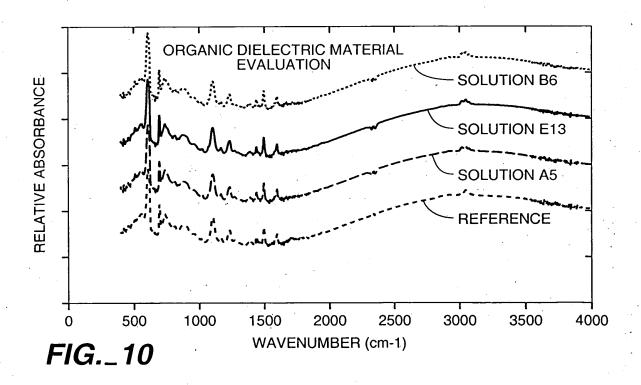


EKCT-014/01US

Inventor(s): Catherine M. Payne, et al.

Atty. Docket No.: 008317-0123-999





Damascene System

Inventor(s): Catherine M. Payne, et al. Atty. Docket No.: 008317-0123-999



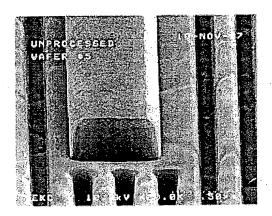


FIG._11

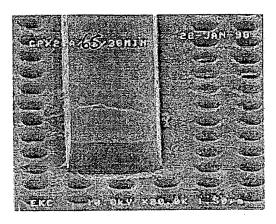


FIG._12

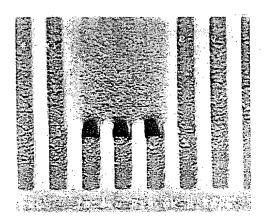


FIG._13

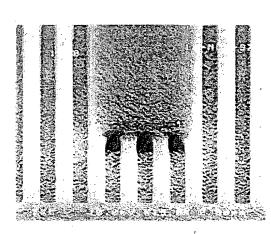


FIG._14

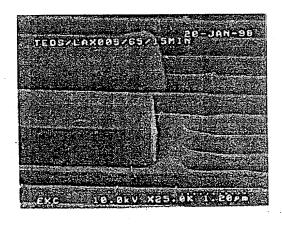


FIG._15

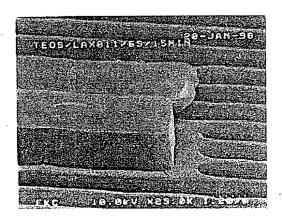


FIG._16

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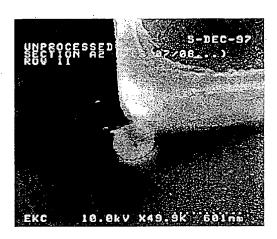


FIG._17

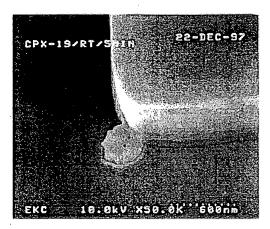


FIG._18

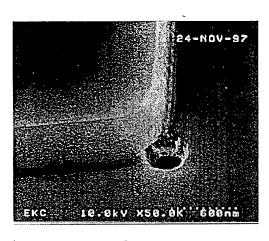


FIG._19

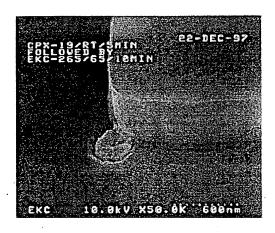


FIG._20

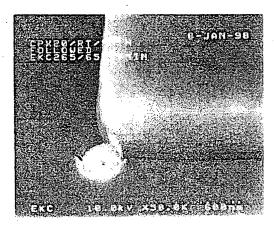


FIG._21

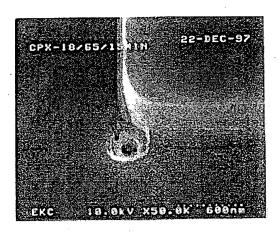


FIG._22

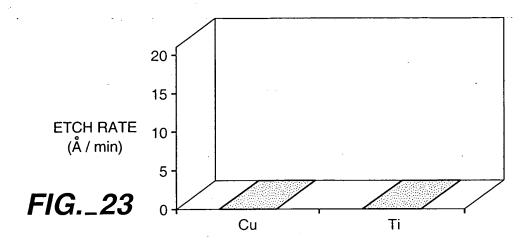
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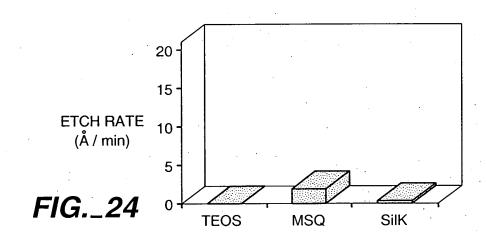
Title: Post Etch Cleaning Composition and Process Damascene System

Inventor(s): Catherine M. Payne, et al. Atty. Docket No.: 008317-0123-999

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Dual





Title: Post Etch Cleaning Composition and Process for Dual Damascene System

Inventor(s): Catherine M. Payne, et al. Atty. Docket No.: 008317-0123-999

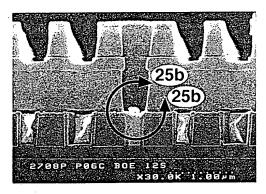


FIG._25a

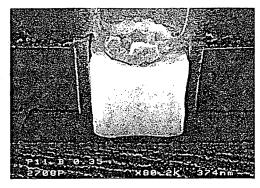
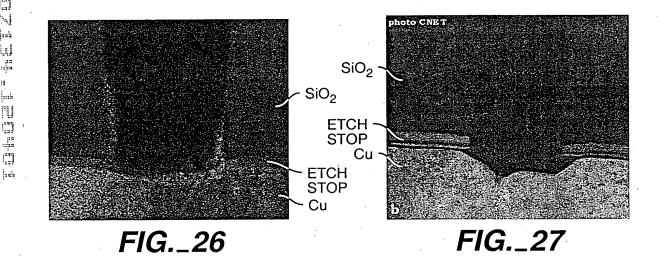


FIG._25b



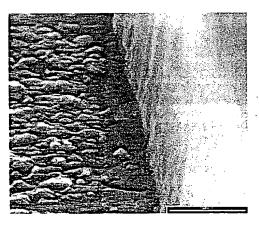


FIG._28

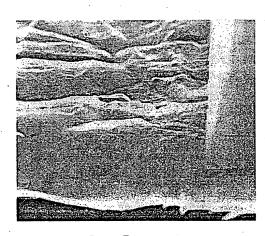


FIG._29

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amascene System inventor(s): Catherine M. Payne, et al. Atty. Docket No.: 008317-0123-999

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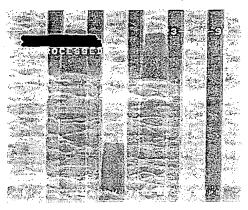


FIG._30

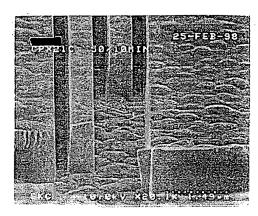


FIG._31

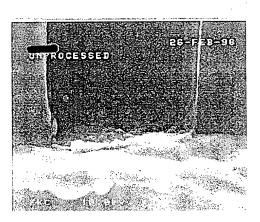


FIG._32

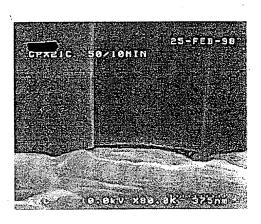


FIG._33

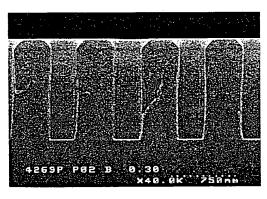


FIG._36

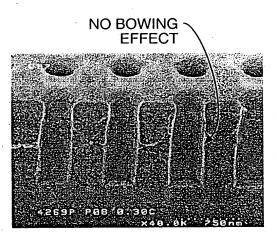


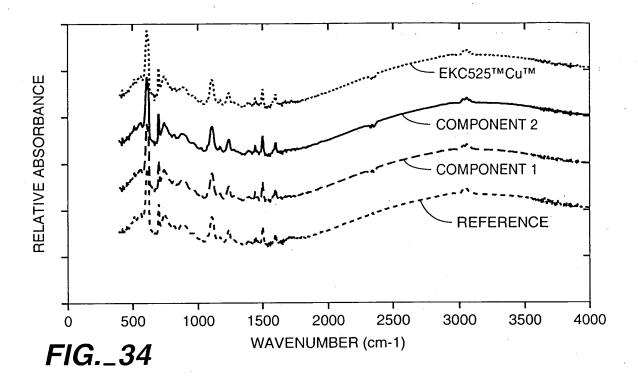
FIG._37

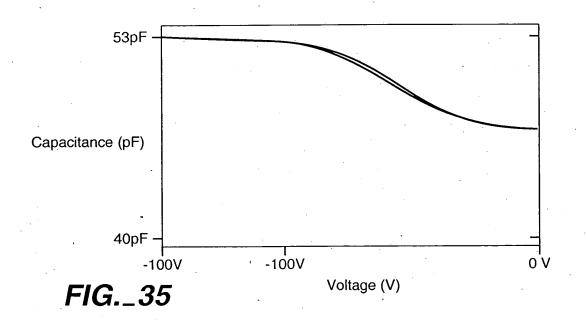
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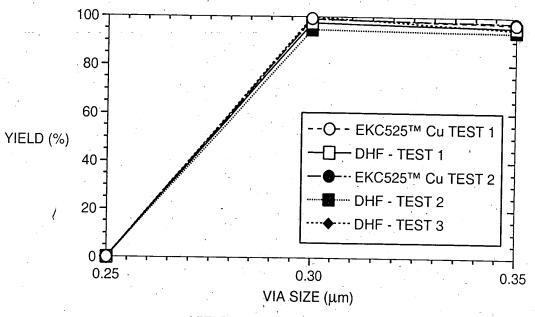


FIG._38

YIELD RESULTS ON COPPER TEOS STRUCTURE VERSUS VIA SIZE COMPARING DHF AND CLEANING SOLUTION

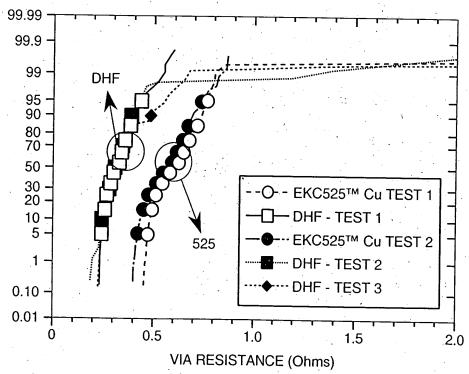


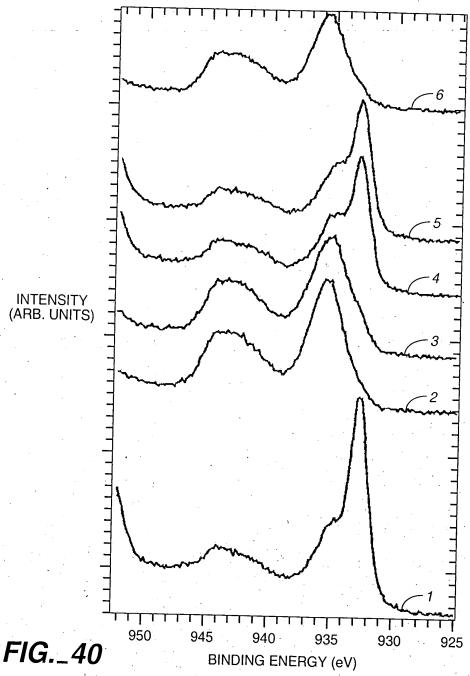
FIG._39

VIA RESISTANCE HISTOGRAM FOR 0.3 μm VIAS COMPARING DHF AND CLEANING SOLUTION

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XPS ANALYSIS OF THE SURFACE COMPOSITION
OF A COPPER BLANKET BEFORE (1), AFTER
ETCHING (2 AND 3) AND AFTER CLEANING IN THE SOLUTION (4 AND 5) AND IN SOLUTION B8 (6).

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